

# **PH RI/BRA/FS Documents**

**Updated 2/2/12**

## **12/14/10 EPA/LWG FS Check-in Mtg**

- Takes the place of the scheduled “Alternative Development & Screening Check-in Mtg”
- LWG presents 4 “FS Tools”
  - 1) Preliminary Capping & Isolation Evaluation
  - 2) Preliminary Methods for Volume Determination
  - 3) Disposal Site Screening
  - 4) PRG & SMA Mapping Uncertainty

## **12/8/10 EPA (Chip & Eric) to LWG (Bob W)- Letter**

- EPA’s review of LWG’s 11/18/10 response to non-directed RI/BRA comments
- 3 outstanding comments:
  - 1) CSM (linking sources to in-water contamination)
  - 2) data lockdown date
  - 3) inclusion of PDBE fish data in HHBRA

## **12/21/10 EPA (Chip) to LWG Bob W)- Letter**

- EPA’s requirements to ensure draft FS is of acceptable quality & on schedule
  - 1) As a result of not presenting Alt Development & Screening 12/14/10..., LWG hasn’t met its obligation under AOC
  - 2) Draft FS must evaluate RAAs to achieve all 4/21/10 PRGs
  - 3) EPA is concerned with LWG’s “quantitative sensitivity analysis & uncertainty analysis’ proposals (as part of Risk Mgmt) will delay the project schedule
  - 4) To meet AOC obligations, the LWG must submit Alt Development & Screening. EPA will not formally respond & LWG should continue preparing the FS.
  - 5) Draft FS due 6/15/11

## **1/12/11 LWG (Bob W) to EPA (Chip)- Letter**

- LWG response to EPA’s 12/21/10 letter & EPA 9/27/10 & 12/8/10 RI/BRA letters
- LWG requests extension to 6/15/11 due date for FS

## **1/25/11 LWG’s**

- “MNR Empirical LOE Evaluation & Modeling Methods”

## **1/13/11 City (Rick A) to EPA (Chip)- Letter**

- City’s Alternative/separate view of LWG’s 1/12/11 Letter

## **1/28/11 EPA (Chip) to LWG (Bob W)- Letter**

- EPA’s comments on LWG’s 12/14/10 four “FS Tools” presentation

## **2/2/11 LWG (Bob W) to EPA (Chip)- Letter**

- LWG’s request for project deliverables extension:
  - Revised BHHRA- 6/15/11
  - Revised BERA- 7/27/11
  - Revised RI 9/28/11
  - Draft FS- 12/14/11

**2/25/11 EPA (Chip & KK) to LWG (Bob W)- Letter**

- Reply to LWG's 1/12 & 2/2/11 letters requesting project schedule extension
- EPA directs LWG to submit:
  - Revised BHHRA- 5/2/11..., but submit tables & calculations for combined adult child scenarios, evaluation of PBDE, & breast milk scenarios by 3/17/11
  - Revised BHHRA- 7/5/11
  - Revised RI-
    - EPA suggests a quicker review of RI by LWG submitting the rpt in sections. If LWG agrees, EPA accepts suggestion, complete RI is due 9/28/11. EPA directs LWG to submit schedule starting 3/21/11 thru 7/5/11 for preliminary revised sections.
    - If LWG doesn't accept EPA's suggestion..., RI due 8/1/11
  - Remedial Alternative Development & Screening-
    - Stipulated are accruing since 12/14/10
    - If LWG submits alternative screening analysis by 4/1/11, EPA may not assess penalties
    - If LWG doesn't submit alternative screening analysis by 4/1, then EPA may take over the work
    - EPA expects LWG to submit: site-wide GRAs..., site-wide technology screening for GRAs..., assemble & screen site-wide RAAs..., then evaluate each site-wide GRA, technology, & RAA for each AOPC.
    - EPA is not requiring LWG to submit AOPC to SMA conversion as part of the alternative screening analysis, but expects LWG to present 3 examples of AOPC to SMA conversion by 8/4/11
- Draft FS- 11/15/11
  - Check-in mtg on key FS elements (including RALs) no later than 6/22/11
  - Include all EAs in draft FS

**3/16/11 LWG (Jen W) to EPA (Chip & KK)- e-mail transmittal**

- LWG's 3/16/11 "Draft Identification of "COCs" & Contaminant Mobility Evaluation Criteria for the Draft FS" (1<sup>st</sup> of 5)

**3/16/11 EPA/LWG- mtg**

- Project schedule

**3/17/11 EPA (Chip) to LWG (Bob W & Jim M)- e-mail**

- Revised RI- LWG doesn't want to submit RI in phases. New due date is 8/29/11
- Draft FS- still due 11/15/11

**3/17/11 LWG (**

- Tables & calculation on 1) combined adult/child scenarios..., 2) evaluation of PBDE..., & 3) breast milk scenario

**3/17/11 EPA (KK) to TCT- e-mail**

- KK transmits 3 LWG FS Tools memos (2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> of 5):
  - 1) Draft Mitigation Determination Approach for Use in the FS
  - 2) Treatment Technology Evaluation Tools
  - 3) Draft FS Costing Approach Memo

**3/18/11 LWG (Bob W) to EPA (Chip & KK)- Letter**

- LWG will comply with schedule in EPA's 3/17 e-mail:
  - Revised RI 8/29/11
  - Draft FS- 11/15/11

**3/28/11 EPA (KK) to EPA FS Team- e-mail**

-KK's draft site-wide technology & alternative screen

**3/30/11 LWG (Bob W) to EPA Chip & KK)- Letter**

LWG response to EPA's 3/16 letter re: "Chemical" vs "Contaminant"

**3/31/11 LWG (Jen W) to EPA (Chip & KK)- e-mail**

-LWG's 3/31/11 "Dredging Water Quality Evaluation" (5<sup>th</sup> of 5)

**4/6/11 LWG (Jen W) to EPA (Chip/KK)- e-mail**

-LWG's response to EPA's 3/9/11 comment letter on LWG's 2/23/11 MNR Modeling Slides

**4/6/11 LWG (Jen W) to EPA (Chip & KK)- e-mail**

-LWG's 4/6/11 "Alternatives Screening Presentation" prep for 4/12 EPA/LWG mtg

**4/6/11 EPA/LWG- Mtg**

"Alternatives Screening Presentation"

**4/12/11 LWG/EPA/partners- meeting**

-LWG's "Alternative Screening" Mtg

**4/14/11 LWG (Jen W) to EPA/partners- e-mail**

-Addendum to Alternatives screening presentations...., Institutional Controls

**4/15/11 DEQ (JMA) to EPA (KK & Chip)- e-mail**

-DEQ (& DSL) comments on LWG's 5 FS Tech Memos

**4/20/11 DEQ (JMA) to EPA (KK & Chip)- e-mail**

-JMA's understanding of definition of "SMA"

**4/27/11 EPA (Chip & KK) to LWG (Bob W)- Letter**

-EPA's comments on LWG's 5 FS Tools TMs (submitted in 3/11)

-Directed comments that need to be addressed in draft FS

**4/29/11 DEQ (JMA) to EPA (KK & Chip)- e-mail**

-DEQ's comments on EPA/partners 4/12/11 FS Mtg

-DEQ's expectations for 6/22 FS Key Elements mtg

**5/2/11 LWG (????) to EPA (????)- transmittal**

-LWG's 5/2/11 "Draft Final BHHRA"

**5/13/11 LWG (Jen W) to EPA/partners- e-mail**

-LWG's response to EPA's 4/27/11 comment letter on LWG's 5 3/11 FS Tools TMs

-5 buckets of comments

**5/13/11 EPA (Chip) to LWG (Bob W)- e-mail (Chip forwarded to TCT 5/18)**

-EPA's expectation & request for prep material for 6/21-22 FS Key Elements mtg

**5/26/11 LWG (Bob W) to EPA Chip & KK)- letter**

-“Preparation for June 21 & 22, 2001 Key FS Elements Check-in”

-LWG’s response to EPA’s 5/13 expectations & request for prep material for Key FS Elements mtg

-LWG’s bibliography of important issue documents

**6/21-22/11 EPA/LWG- mtg**

-FS Key Elements Mtg

**7/15/11 EPA (Chip & KK) to LWG (Bob W)- Letter**

-EPA’s “feedback & direction” letter on 6/21-22 FS Key Elements Mtg

-3 major concerns;

- 1) Approach to MNR (over-reliance on MNR in FS)
- 2) RALs for only 3 contaminants & lack of Alt trying to achieve background
- 3) Other technical concerns (subsurface sediment contamination, volumes, costs, docks, hot spots)

**7/21/11 LWG (Jen W) to EPA (KK & Chip)- e-mail**

-‘Initial Working Responses to EPA FS Key Elements Comments’. Feedback on EPA’s 7/15 letter

**7/21/11 EPA (KK & Chip) to LWG (Bob W)- Letter**

-EPA says they agree with calculations & technical findings of 5/2/11 BHHRA, however, the document doesn’t satisfactorily address all EPA comments..., & lacks sufficient clarity.

-EPA intends to modify the 5/2 BHHRA

**7/22/11 LWG (???) to EPA (???) - transmittal**

-LWG’s 7/22/11 “Risk Management Recommendations”

**7/27/11 EPA (KK) to LWG (Bob W)- e-mail**

-Discussion document for 7/27 EPA/LWG Alts & RALs mtg

**7/27/11 LWG (Jen W) to EPA (KK & Chip)- e-mail**

-Table capturing resolutions from 7/26(?) call re: EPA’s 7/15 letter on FS Key Elements mtg

**7/28/11 EPA (Chip) to LWG (Jen W)- e-mail**

-EPA review of LWG’s 7/27 table.

-EPA generally agrees with LWG’s table except on Comment #16 (dredge volumes)

**8/11/11 EPA (Chip & KK) to LWG (Bob W)- letter**

-EPA **direction** re: specific alternatives & RALs for the LWG to use in the FS

-EPA’s table with Alts B, C, D, E, F, & G

-RALs for total PCBs, B(a)P (Eq), sum DDX, & dioxin

**8/12/11 EPA (KK) to LWG (???) - e-mail**

-???? Referenced in LWG’s 8/23 letter???

**8/23/11 LWG (Bob W) to EPA (Chip & KK)- letter**

-Response to EPA’s 8/11/11 letter & KK’s 8/12 e-mail

-LWG will accept EPA’s direction..., although they disagree with some of EPA’s positions

-LWG vaguely introduced the notion of schedule delay

**8/25/11 EPA (Chip) to LWG (Bob W)- letter**

-The LWG has until 8/25 to dispute EPA’s 8/11 direction. If the LWG doesn’t dispute, EPA will assume

the LWG will prepare the draft incorporating the 8/11 direction.  
-If the LWG doesn't dispute..., then the LWG can request a extension to the 11/15/11 deadline for submitting the draft FS

**9/8/11 LWG (Bob W) to EPA (Chip & KK)- letter**

-LWG's formal request to delay submittal of draft FS to 3/30/12

**9/23/11 LWG (Jen W) to EPA (Chip & KK)- e-mail**

-LWG Project Schedules supporting 3/30/12 submittal for draft FS & details re: schedule

**10/7/11 EPA (Chip & KK) to LWG (Bob W)- letter**

-EPA's conditional approval to submit draft FS 3/30/12

**10/13/11 LWG (Bob W) to EPA (Chip & KK)- letter**

-Reply to EPA's 10/7 letter & that LWG will comply with conditions

**10/18/11 Bingham (45 parties) to EPA (Dennis McL)- letter**

-Bingham's concern that FS needs to be technically achievable, sustainable, & capable of withstanding judicial review

-“RI is out of alignment with other EPA sediment sites”

**11/2/11 EPA (Dan O) to Bingham (45 parties)- letter**

-EPA response to Bingham's 10/18/11 letter

**11/14/11 4 Wyden, Merkley, Schrader, Blumenauer to EPA (Lisa Jackson)- letter**

-Concern that PH consider economic impacts of PH decisions

-7 questions following up from 8/11 mtg/boat tour

**11/22/11 Bingham (45 parties) to EPA (Dan O)- letter**

-Follow-up to EPA's 11/2/11 letter

**12/14/11 EPA (Dennis McL) to Wyden, Merkley, Schrader, Blumenauer- letter**

-EPA reply to 4-elected officials' 11/14/11 letter

**12/14/11 Bingham (SIC, Gunderson, Vigor) to EPA (Dennis McL)- letter**

-The Brattle Group white paper “*Economic Impacts of remediating the PH Superfund Site*”

**1/16/12 LWG (Bob W) to EPA (Chip & Kristine)- transmittal letter**

-LWG's “Key FS Work Products”

-Tables, figures & Hot Spot text

**2/2/12 Willamette Riverkeeper (Travis W) to EPA (Lisa Jackson)- letter**

-Travis' response to 4-elected officials 11/14/11 letter & EPA's 12/14/11 response